

Notice of Allowability

Application No.

09/629,993

Examiner

James A. Thompson

Applicant(s)

TAI ET AL.

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 22 November 2006.
2. ☒ The allowed claim(s) is/are 23-32.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

Response to Amendment

1. The Declaration under 37 CFR 1.132 filed 22 November 2006 is sufficient to overcome the rejections of claims 23-32 based upon the disclosure with respect to how edge enhancement would adversely affect the tonal properties of the resultant image. Examiner agrees with Applicant that applying the jagged edge smoothing taught by Lee (US Patent 5,396,584) to the halftone screen blending process taught by Tai (US Patent 5,956,157) would result in an unacceptably modified tone density and an unacceptable modification or destruction of the halftone dot structure. Thus, the modification of Tai according to the teachings of Lee would render the system taught by Tai inoperable for its intended purpose.

Response to Arguments

2. Applicant's arguments, see pages 5-6 and the Declaration under Rule 37 CFR §1.132, filed 22 November 2006, with respect to the rejections under 35 USC §103(a) have been fully considered and are persuasive. The rejections under 35 USC §103(a) listed in items 3-6 of the final rejection, mailed 22 September 2006, have been withdrawn.

Allowable Subject Matter

3. **Claims 23-32 are allowed.**

The following is an examiner's statement of reasons for allowance:

Claims 23 and 24 each have the combination of features (1) selecting one of a plurality of planes based on a pixel's intensity and associating one of a plurality of microdot densities in the selected plane with the pixel based on the pixel's location, (2) blending first and second gray level data, and (3) performing edge enhancement on the portions of the blended gray-level data that include text or high-contrast-edge data. Examiner has not discovered this particular combination of features in the prior art such that claims 23 and 24 are either anticipated or rendered obvious to one of ordinary skill in the art at the time of the invention. The closest prior art discovered is the above-mentioned Tai reference. Claims 25-32 depend from either claim 23 or claim 24, and are therefore allowable due to their respective dependencies.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Thompson whose telephone number is 571-272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



05 December 2006

James A. Thompson
Examiner
Technology Division 2625



DAVID MOORE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2625